

CLAIM AMENDMENTS

1 Claim 1. (Currently Amended) A roll assembly for a
2 rolling mill comprising:
3 a roll shaft having an axis;
4 a mill roll driven by said roll shaft; and
5 a first toothed ring fixed on said roll shaft and a
6 second toothed ring interdigitated and coaxial with said first
7 toothed ring and fixed on said mill roll whereby said toothed rings
8 transmit torque between them, said roll being a roll of a planetary
9 cross-roll mill and said first toothed ring being mounted on an end
10 face of an axial end of said roll shaft and said second toothed
11 ring being mounted on an end face of an axial end of said mill
12 roll, the teeth of said toothed rings extending axially with
13 respect to said axis and perpendicular to said end faces.

Claim 2 (cancelled)

1 Claim 3 (currently amended) The roll assembly defined
2 in claim [[2]] 1 wherein the teeth of said toothed rings are in a
3 straight-tooth gear pattern.

1 Claim 4 (currently amended) The roll assembly defined
2 in claim [[2]] 3 wherein at least one of said toothed rings is
3 affixed to the respective end face by a plurality of pins.

1 Claim 5 (original) The roll assembly defined in claim 4
2 wherein said pins have axes parallel to a common axis of said
3 toothed rings.

1 Claim 6 (original) The roll assembly defined in claim
2 5, further comprising generally conical centering formations
3 centering said shaft with respect to said roll.

1 Claim 7 (original) The roll assembly defined in claim 6
2 wherein said conical centering formations include a conically
3 tapered projection on one of said axial ends fitting into a
4 conically tapered recess on the other of said axial end and
5 receiving said projection.

1 Claim 8 (original) The roll assembly defined in claim
2 7 wherein said projection is formed on said shaft and extends into
3 said roll to a depth which is at least 30% of the axial length of
4 said roll.

1 Claim 9 (original) The roll assembly defined in claim
2 8, further comprising a screw connection between said roll and said
3 shaft.

1 Claim 10 (original) The roll assembly defined in claim
2 9 wherein said screw connection has a single screw coaxial with
3 said shaft and said roll.

1 Claim 11 (original) The roll assembly defined in claim
2 10, further comprising a seal between the roll and the shaft.

Claims 12 and 13 (cancelled).

1 Claim 14 (Currently amended) The roll assembly defined
2 in claim [[12]] 1 wherein at least one of said toothed rings is
3 affixed to the respective end face by a plurality of pins.

1 Claim 15 (original) The roll assembly defined in claim
2 14 wherein said pins have axes parallel to a common axis of said
3 toothed rings.

1 Claim 16 (original) The roll assembly defined in claim
2 12, further comprising generally conical centering formations
3 centering said shaft with respect to said roll.

1 Claim 17 (original) The roll assembly defined in claim
2 16 wherein said conical centering formations include a conically
3 tapered projection on one of said axial ends fitting into a
4 conically tapered recess on the other of said axial end and
5 receiving said projection.

1 Claim 18 (currently amended) The roll assembly defined
2 in claim ~~[[7]]~~ 17 wherein said projection is formed on said shaft
3 and extends into said roll to a depth which is at least 30% of the
4 axial length of said roll.

1 Claim 19 (Currently amended) The roll assembly defined
2 in claim ~~[[12]]~~ 1, further comprising a ~~[[screw]]~~ single screw
3 coaxial with said shaft and said roll for connecting said roll to
4 said shaft.

1 Claim 20 (Currently amended) The roll assembly defined
2 in claim ~~[[12]]~~ 1, further comprising a seal between the roll and
3 the shaft.